

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,454	10/02/2000	Donald W. Schmidt	POU920000173US1	5119
7590 03/15/2004			EXAMINER	
Floyd A.Gonzalez			PERVEEN, REHANA	
IBM Corporation 2455 South Road P386 Poughkeepsie, NY 12601			ART UNIT	PAPER NUMBER
			2182	5
		DATE MAILED: 03/15/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

1) ⊠ Responsive to communication(s) filed on 02 October 2000. 2a) ☐ This action is FINAL. 2b) ☑ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☑ Claim(s) 1-24 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) 1-3.9-11 and 17-19 is/are rejected. 7) ☑ Claim(s) 4-8.12-16 and 20-24 is/are objected to. 8) ☐ Claim(s) 4-8.12-16 and 20-24 is/are objected to. 8) ☐ Claim(s) 4-8.12-16 and 20-24 is/are objected to. 9) ☐ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on 02 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). **See the attached detailed Office action for a list of the certified copies not received.							
### Examiner Reham Perveen 2182 ### The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ② MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. ■ Extensions of time may be available under the provisions of 31 CFR 1.138(a). In no event, however, may a reply be timely filled. ■ Exploration of time may be available under the provisions of 31 CFR 1.138(a). In no event, however, may a reply be timely filled. ■ Exploration of time may be available under the provisions of 31 CFR 1.138(a). In no event, however, may a reply be timely filled. ■ Exploration of the may be available under the provisions of 31 CFR 1.138(a). In no event, however, may a reply be timely filled. ■ Exploration of the major that the major that the mailing date of the communication. ■ Exploration of the major that the major that the mailing date of the communication, even if timely filled, may reduce any search placed between them adjustment. See 37 CFR 1.704(b). ### Responsive to communication(s) filled on Q2 October 2000. ### 2000 This action is FINAL. ■ 20)		Application No.	Applicant(s)				
Responsive to communication for allowance except for formal matters, prosecution as to the merits is closed in accordance with the application. Application of Claims 1.32	•	09/677,454	SCHMIDT ET AL.				
The MALING DATE of this communication appears on the cover sheet with the correspondence address — Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Estimation of time may be available under the provisions of 3 CFR 1.13(a). In ne event, however, may a reply be timely filed Estimation of time may be available under the provisions of 3 CFR 1.13(a). In ne event, however, may a reply be timely filed Estimation of time may be available under the provisions of 3 CFR 1.13(a). In ne event, however, may a reply be timely filed If the period for reply appedited above is less than thirty (30) days, a reply within the claimley minimum of thirty (30) says will be considered timely. If the period for reply appedited and the time timely day and well provided the provided of this communication. Fabrus to sept when the event reply is appedited and the communication is the provided of this communication. Fabrus to sept when the event reply is appedited and the communication is experimentally and the provided and of the communication is experimentally and the provided and of the communication. **Responsive to communication(s) filed on 02 october 2000.** 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Exparte Quayle, 1935 C.D. 11, 453 O.G. 213. **Disposition of Claims** 4) Claim(s) 1-24 is/are pending in the application. 4) Claim(s) 1-24 is/are pending in the application. 4) Claim(s) 1-24 is/are allowed. 5) Claim(s) 1-24 is/are allowed. 6) Claim(s) 1-24 is/are allowed. 6) Claim(s) 1-32 is/are allowed. 7) Claim(s) 1-32 is/are allowed. 8) Claim(s) 1-32 is/are allowed. 9) The specification is objected to by the Examiner. Application Papers 9) The specification is objected to by the Examiner. Application Papers 9) The specification is added the provision of the prio	Office Action Summary	Examiner	Art Unit				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MALLING DATE OF THIS COMMUNICATION. - after EXX (%) MONTHS from the make and the provisions of 37 GFR 1.136(b). In an event, however, may a reply be timely filed and the provision of 37 GFR 1.136(b). In an event, however, may a reply be timely filed and the provision of 37 GFR 1.136(b). The event, however, may a reply be timely filed and the provision of 37 GFR 1.136(b). The event, however, may a reply be timely filed and the provision of the provision							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Ethermouse dismanyle be available under the proximous of 3 CFR 1.35(6). In no event, however, may a reply be timely filed Ethermouse of immanyle be available under the proximous of 3 CFR 1.35(6). In no event, however, may a reply be timely filed Ethermouse of for reply specified above is like a brait filing (30) days, a reply valid in the period for reply specified above is like a brait filing (30) days, a reply valid in the period for reply specified above is like a brait filing (30) days, a reply valid in the period for reply specified above is like a brait filing (30) days, a reply valid in the set of exherical period for reply valid in the set of exherical period for reply specified above is like a brait filing (30) days and the graph gash and viting reply and valid graphs (30) (40) MINE filing (30) days will be considered in the communication. Fallow to reply valid in the set of exherical period for reply specified and set of the communication, even it timely filed, may reduce any example and the communication, even it timely filed, may reduce any example and the communication of the communication is an operation for all owners except for formal matters, prosecution as to the ments is closed in accordance with the practice under Exparte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-24 is/are pending in the application. 4) Claim(s) 1-24 is/are pending in the application. 5) Claim(s) 1-3.9-11 and 17-19 is/are rejected. 7) Claim(s) 1-3.9-11 and 17-19 is/are rejected. 7) Claim(s) 1-3.9-11 and 17-19 is/are rejected. 7) Claim(s) 1-3.9-11 and 17-19 is/are rejected. 1) The drawing(s) filed on 02 October 2000 is/are: a) accepted or b) objected to by the Examiner. 4) Claim(s) 1-3.9-11 and 17-19 is/are rejected. 1) The drawing(s) filed on 02 Oc		appears on the cover sheet with the o	correspondence address				
1)	THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a r - If NO period for reply is specified above, the maximum statutory perion. - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the ma	N. 1.136(a). In no event, however, may a reply be tireply within the statutory minimum of thirty (30) day of will apply and will expire SIX (6) MONTHS from tute. cause the application to become ABANDONE	mely filed ys will be considered timely. the mailing date of this communication. ED (35 U.S.C. § 133).				
2a) ☐ This action is FINAL. 2b) ☐ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☐ Claim(s) 1-24 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-39-11 and 17-19 is/are rejected. 7) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 02 October 2000 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received.	Status						
2a) ☐ This action is FINAL. 2b) ☐ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☐ Claim(s) 1-24 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-39-11 and 17-19 is/are rejected. 7) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 02 October 2000 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received.	1) Responsive to communication(s) filed on 02	October 2000.					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4)							
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4)	3) Since this application is in condition for allow	·					
4)							
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ☒ Claim(s) is/are allowed. 7) ☒ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on O2	Disposition of Claims	•					
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on <u>02 October 2000</u> is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) All Interview Summary (PTO-413) Paper No(s)/Mail Date.	 4a) Of the above claim(s) is/are withd 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) <u>1-3,9-11 and 17-19</u> is/are rejected. 7) ☐ Claim(s) <u>4-8,12-16 and 20-24</u> is/are objected. 	rawn from consideration. d to.					
10) The drawing(s) filed on <u>02 October 2000</u> is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) All Interview Summary (PTO-413) Paper No(s)/Mail Date.	Application Papers						
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Notice of Informal Patent Application (PTO-152)	10) ☐ The drawing(s) filed on <u>02 October 2000</u> is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the corre	re: a)⊠ accepted or b)□ objected ne drawing(s) be held in abeyance. Se ection is required if the drawing(s) is ob	e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d).				
a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. *Attachment(s) Notice of References Cited (PTO-892)	Priority under 35 U.S.C. § 119						
Notice of References Cited (PTO-892) Interview Summary (PTO-413)	 a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). 						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Informal Patent Application (PTO-152)	Attachment(s)						
8) Minformation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)	1) Notice of References Cited (PTO-892)						
	3) 🔯 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0	(8) 5) 🔲 Notice of Informal P					

Application/Control Number: 09/677,454

Art Unit: 2182

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 9-11, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loughran et al, Patent No. 6,570,848, in view of Gioquindo et al, Patent No. 6,654,812.

As to claim 1, Loughran et al teach registering a send queue in a lookup table, registering a receive queue in the lookup table, and executing a send from a source which interrogates the lookup table to locate the send queue and the receive queue and send the data in the send queue to the receive queue of a destination (col. 3 lines 5-53).

Gioquindo et al teach a data processing system having multiple logical partitions and communication between partitions using a lookup table (abstract, col. 2 lines 41-50, and col. 5 lines 44-60).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Loughran et al and Gioquindo et al because

Application/Control Number: 09/677,454

Art Unit: 2182

utilizing Loughran et al's data transfer method into Gioquindo et al's inter-partition communication would have enabled more efficient flow control for prior existing partition to partition data transfer system.

As to claim 2, it is noted that neither Loughran et al nor Gioquindo et al expressly teach the send queue and the receive queue are established in accordance with QDIO architecture. However, it has been quite well known to one of ordinary skill in the art at the time of the invention, the benefits and advantages of using the QDIO architecture, thus making it obvious to utilize such prior art architecture.

As to claim 3, Loughran et al teach the lookup table is stored in a hardware storage area of a data processing system (col. 3 lines 5-53).

Claims 9-11 and 17-19 are directed to the system implementing the method of claims 1-3. Loughran et al and Gioquindo et al, in combination, teach the method as set forth in claims 1-3. Therefore, Loughran et al and Gioquindo et al, in combination, also teach the system as set forth in claims 9-11 and 17-19.

Allowable Subject Matter

Claims 4-8, 12-16, and 20-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rehana Perveen whose telephone number is 703-305-8476. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey C Gaffin can be reached on 703-308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rehana Perveen

Primary Patent Examiner

Technology Center 2100